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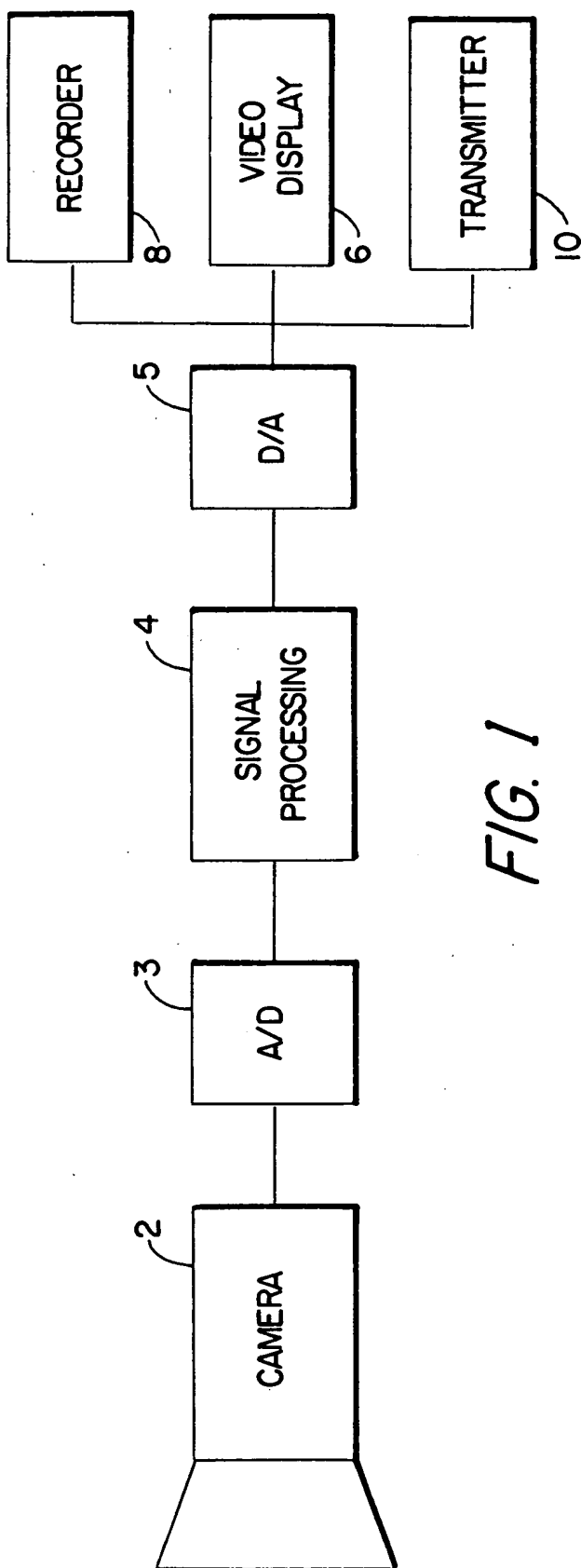


FIG. 1

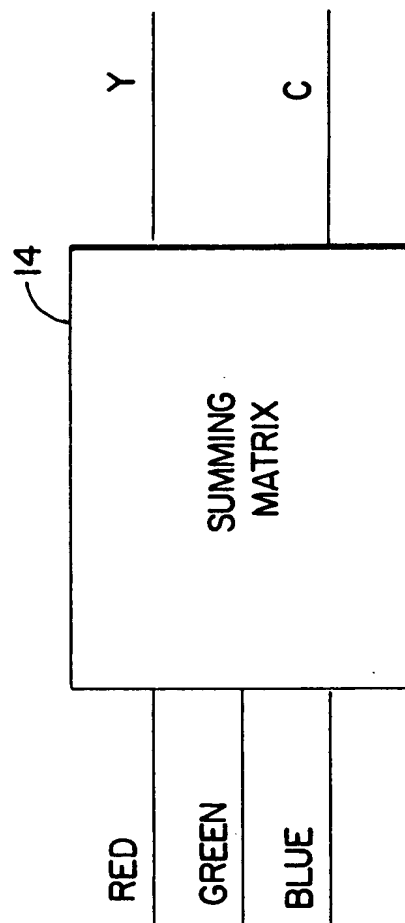


FIG. 2

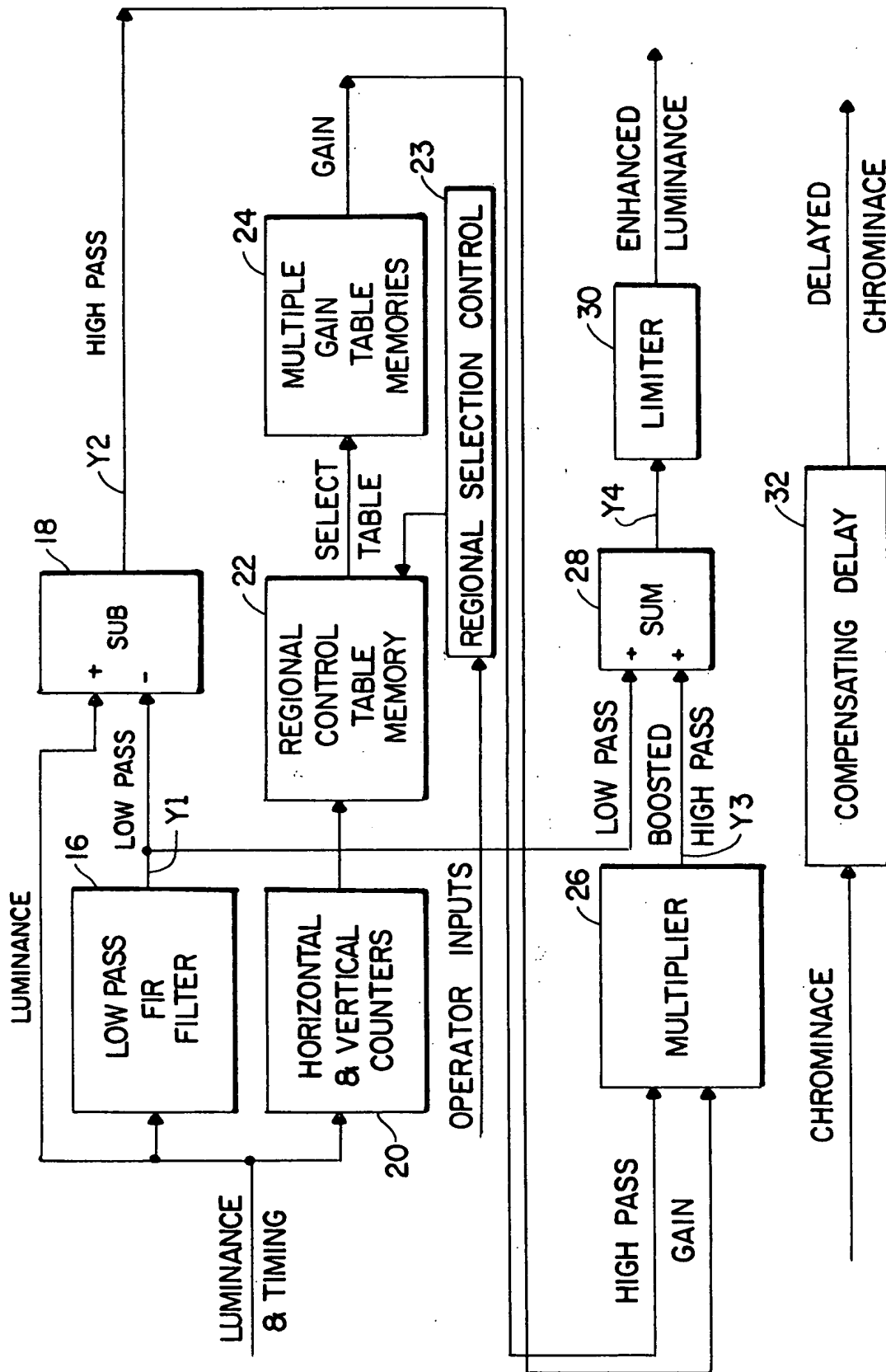


FIG. 3

GAIN TABLE MEMORY EXAMPLES

(WHITE) ↑

LOW PASS  
VALUES

0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0

(BLACK)

GAIN TABLE 0  
ALL VALUES = 0

**FIG. 4A**

0.5
0.5
0.5
0.5
0.5
0.5
0.5
0.5
0.5

GAIN TABLE 1  
ALL VALUES = 0.5

**FIG. 4B**

1.0
1.0
1.0
1.0
1.0
1.0
1.0
1.0
1.0

GAIN TABLE 2  
ALL VALUES = 1.0

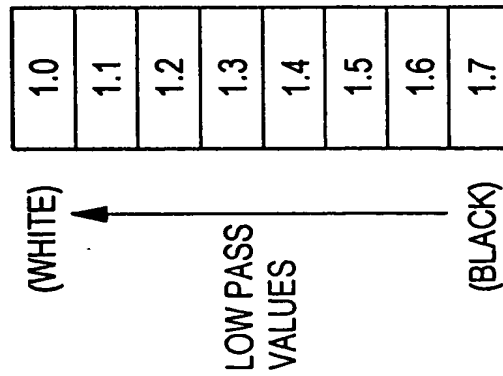
**FIG. 4C**

1.0
1.0
1.1
1.1
1.2
1.2
1.3
1.3

GAIN TABLE 3  
ENHANCEMENT  
LEVEL 1

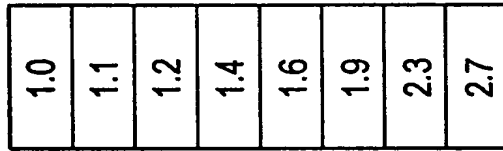
**FIG. 4D**

GAIN TABLE MEMORY EXAMPLES



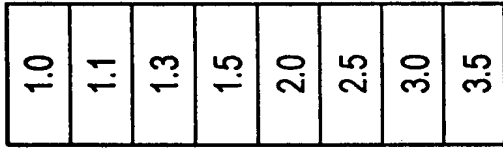
GAIN TABLE 4  
ENHANCEMENT  
LEVEL 2

**FIG. 4E**



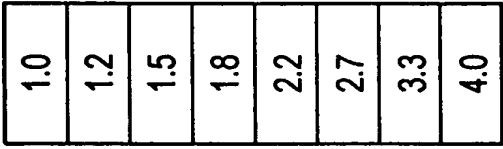
GAIN TABLE 5  
ENHANCEMENT  
LEVEL 3

**FIG. 4F**



GAIN TABLE 5  
ENHANCEMENT  
LEVEL 4

**FIG. 4G**



GAIN TABLE 7  
ENHANCEMENT  
LEVEL 5

**FIG. 4H**

REGIONAL CONTROL TABLE  
MEMORY EXAMPLE 1

A 9x9 grid representing a regional control table. The grid is composed of cells containing the values 0 or 7. A central 3x3 region of cells contains the value 7, while all other cells contain the value 0. To the left of the grid is a vertical arrow pointing upwards, labeled 'VERT'. Below the grid is a horizontal arrow pointing to the right, labeled 'HORIZ'.

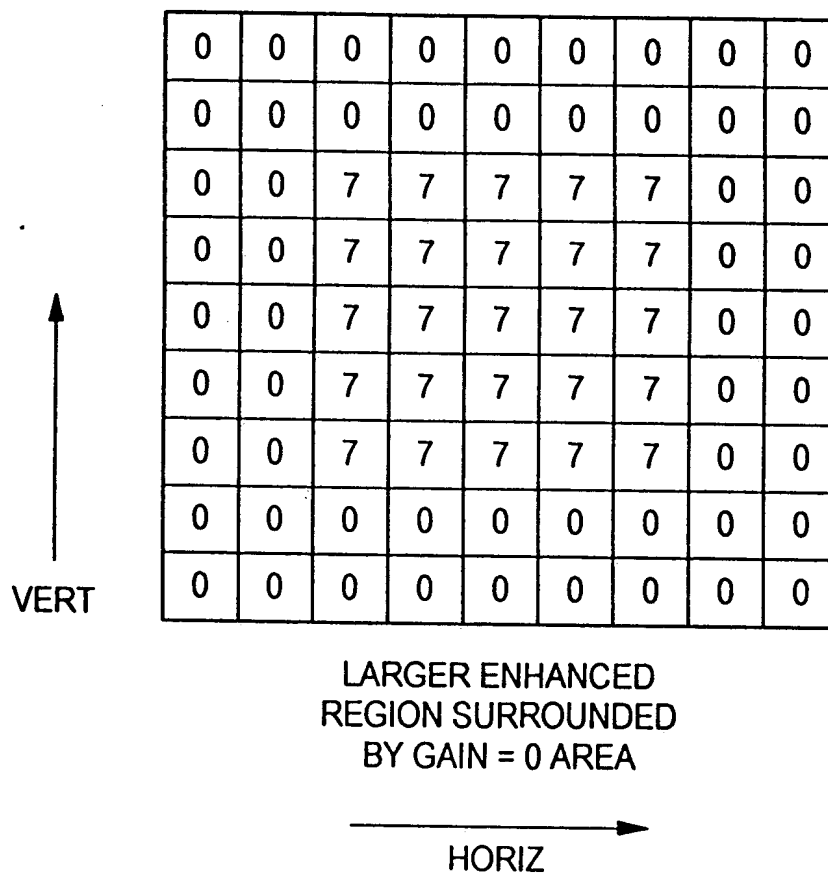
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	7	7	7	0	0	0
0	0	0	7	7	7	0	0	0
0	0	0	7	7	7	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

VERT

SMALL ENHANCED  
REGION SURROUNDED  
BY GAIN = 0 AREA

HORIZ

**FIG. 5A**

REGIONAL CONTROL TABLE  
MEMORY EXAMPLE 2

The diagram shows a 9x9 grid of cells. The first two columns (index 0 and 1) are entirely filled with the value 0. The last two columns (index 8 and 9) are also entirely filled with the value 0. The central five columns (index 2 through 6) form a 5x5 sub-grid. The top two rows of this sub-grid (rows 3 and 4) are filled with the value 7. The bottom three rows of this sub-grid (rows 6, 7, and 8) are filled with the value 0. This creates a central 5x5 region of 7s surrounded by a border of 0s. To the left of the grid, a vertical arrow points upwards, labeled 'VERT'. Below the grid, a horizontal arrow points to the right, labeled 'HORIZ'. Centered below the horizontal arrow is the text 'LARGER ENHANCED REGION SURROUNDED BY GAIN = 0 AREA'.

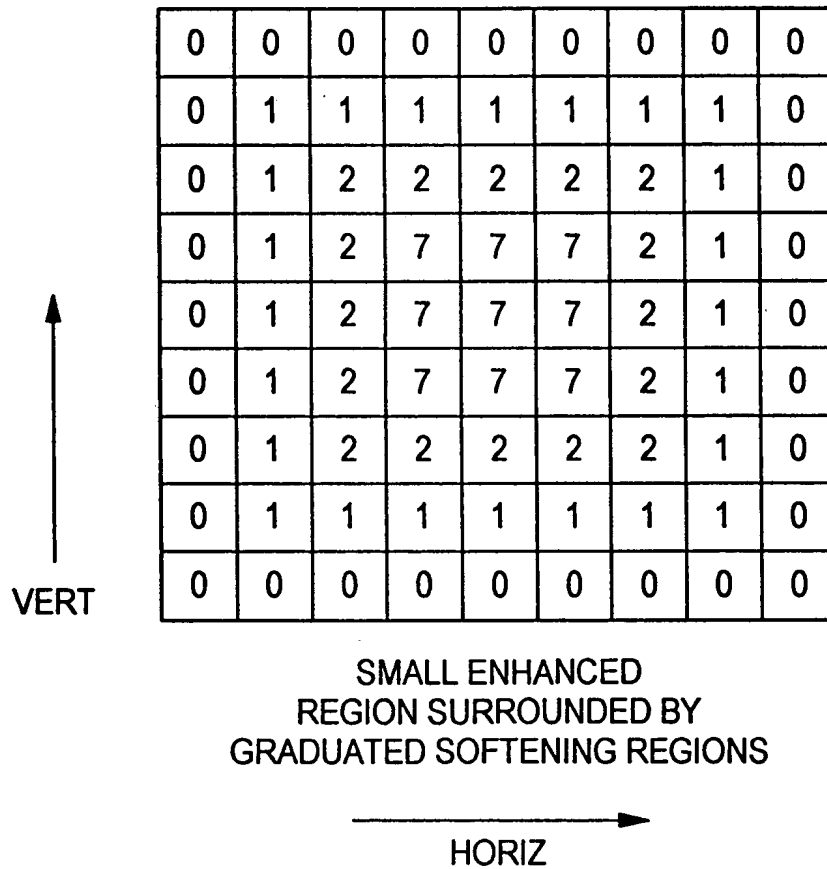
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	7	7	7	7	7	0	0
0	0	7	7	7	7	7	0	0
0	0	7	7	7	7	7	0	0
0	0	7	7	7	7	7	0	0
0	0	7	7	7	7	7	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

VERT

LARGER ENHANCED  
REGION SURROUNDED  
BY GAIN = 0 AREA

HORIZ

**FIG. 5B**

REGIONAL CONTROL TABLE  
MEMORY EXAMPLE 3


0	0	0	0	0	0	0	0	0
0	1	1	1	1	1	1	1	0
0	1	2	2	2	2	2	1	0
0	1	2	7	7	7	2	1	0
0	1	2	7	7	7	2	1	0
0	1	2	7	7	7	2	1	0
0	1	2	2	2	2	2	1	0
0	1	1	1	1	1	1	1	0
0	0	0	0	0	0	0	0	0

VERT

HORIZ

SMALL ENHANCED  
REGION SURROUNDED BY  
GRADUATED SOFTENING REGIONS

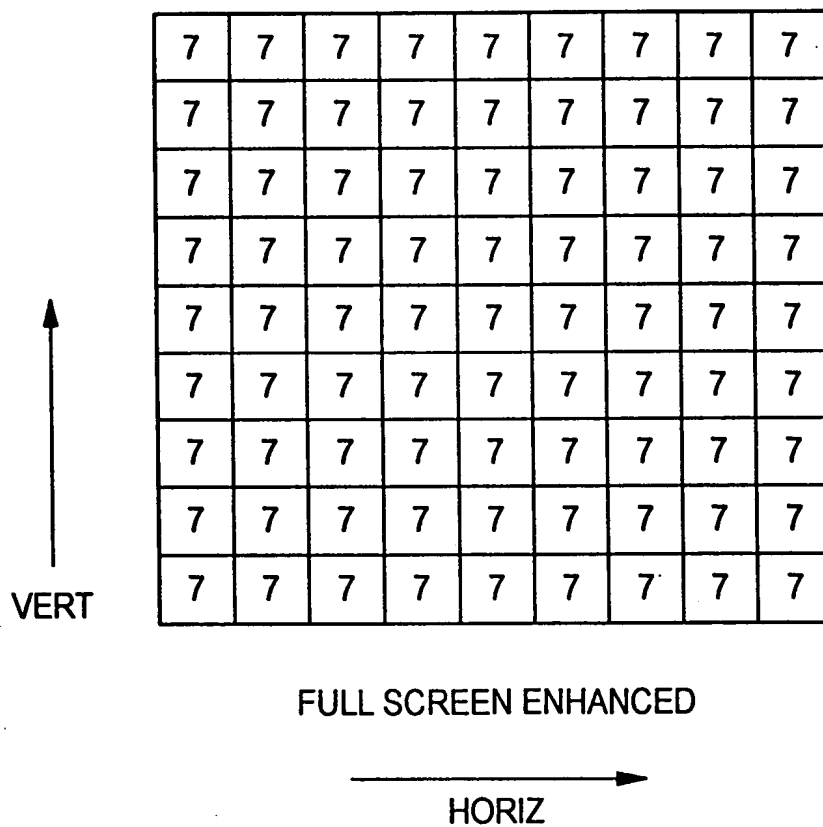
**FIG. 5C**

REGIONAL CONTROL TABLE  
MEMORY EXAMPLE 4

7	7	7	7	7	2	2	2	2
7	7	7	7	7	2	2	2	2
7	7	7	7	7	2	2	2	2
7	7	7	7	7	2	2	2	2
7	7	7	7	7	2	2	2	2
7	7	7	7	7	2	2	2	2
7	7	7	7	7	2	2	2	2
7	7	7	7	7	2	2	2	2
7	7	7	7	7	2	2	2	2

SPLIT SCREEN  
LEFT SIDE ENHANCED  
RIGHT SIDE GAIN = 1  
HORIZ**FIG. 5D**



REGIONAL CONTROL TABLE  
MEMORY EXAMPLE 5

VERT

7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7

FULL SCREEN ENHANCED

HORIZ

***FIG. 5E***